

preselected temperature relative to ambient conditions, within a given temperature range.

2. (Amended) The combustible turbine system according to claim 1 wherein said [portion of said fuel line is disposed in heat transfer relationship with said combustion gas which has been exhausted from said turbine] preselected temperature is determined, from a constituent analysis of the fuel, to approach a temperature at which said fuel burns most completely substantially destroying undesirable byproducts while remaining below a temperature that would otherwise cause thermal decomposition of said fuel's constituents.

5. (Amended) The combustion turbine system according to claim 4 wherein said portion of said fuel line is disposed in heat transfer relationship with said combustion gas traversing said exhaust stack[and in heat transfer relationship with said combustion gas].

6. (Amended) The combustion turbine system according to claim [5] 1 wherein said system further includes a by-pass fuel system for directing unheated fuel to said combustor.

8. (Amended) The combustion turbine system according to claim 7 wherein the controller comprises said by-pass fuel system further [comprising] including control means connected to said fuel line for controlling the amount of said heated fuel and the amount of said unheated fuel being delivered to said combustor.

10. (Amended) The combustion turbine system according to claim [9] 5 wherein said portion of said fuel line is disposed in a by-pass channel of said exhaust stack.

12. (Amended) The combustion turbine system according to claim [11] 9 wherein said control valve means comprises a globe valve.

13. (Amended) The combustion turbine system according to claim [12] 9 wherein said temperature controller means comprises a digital positioner.

14. (Amended) The combustion turbine system according to claim 3 wherein said [combustion turbine system further includes a by-pass fuel system for directing unheated fuel to said combustor] fuel is natural gas and said preselected temperature is in a range between 600 - 750°F (315-400°C).

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15. (Amended) The combustion turbine system according to claim [14] 6 wherein said by-pass fuel system comprises a by-pass fuel line connected to a source of said fuel and connected to said combustor for delivering unheated fuel to said combustor.

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18. (Amended) The combustion turbine system according to claim [17] 3 wherein said combustion turbine system further comprises a heat recovery steam generator located downstream of said turbine with said combustion gas flowing therethrough, and with said portion of said fuel line being disposed in heat transfer relationship with said combustion gas traversing said heat recovery steam generator[and in heat transfer relationship with said combustion gas].

19. (Amended) The combustion turbine system according to claim 18 wherein said heat recovery steam generator [comprises] includes a by-pass passage wherein said portion of said fuel line is disposed in the path of said combustion gas within said by-pass passage.

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21. (Amended) A method of operating a combustion turbine system comprising:

combusting air and fuel thereby generating a combustion gas; directing said combustion gas through a turbine for driving said turbine;

exhausting said combustion gas from said turbine, and directing said combustion gas in heat transfer relationship with a portion of a fuel line thereby heating said fuel therein; [and]

controlling the amount of heat imparted by said combustion gas to the fuel prior to said fuel being introduced into said combustor to maintain at least a portion of said fuel at a substantially elevated preselected temperature relative to ambient conditions, within a given temperature range; and

conducting said heated fuel into said combustor.

22. (Amended) The method according to claim 21 wherein said [method] controlling step further comprises mixing unheated fuel with said heated fuel prior to introduction into said combustor.

Add the following new claims:

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